

ENVIRONMENTALLY CORRECT CONCEPTS™, INC.

GREENHOUSE GAS REPORTING WORKSHOPS

AGRICULTURE RULES AND REPORTING GUIDELINES

JANUARY 14-15, 2003 & JANUARY 23, 2003, WASHINGTON, D.C.

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Background

I am John Caveny from Monticello, Illinois, president of Environmentally Correct Concepts, Inc. – a company that developed and patented practical climate change mitigation technology. I graze cattle and like to think of myself as a “practical conservationist”. I believe that farm and ranchland should be “working land” instead of “retired land” and managed to make money from core agricultural enterprises and ecosystem services. I am providing written comments in response to a solicitation for accounting rules and guidelines for forest and agriculture greenhouse gas offsets that will be used in the Department of Energy’s (DOE) 1605(b) greenhouse gas reporting system (Federal Register Notice, November 13, 2002).

Environmentally Correct Concepts, Inc. (ECCI)™ believes the United States can be a leader in reducing rates and amounts of greenhouse gases going into the atmosphere by using plant based renewable fuels, market forces, and voluntary programs, as well as through creation and expansion of carbon sinks on public and private land.

Introduction

ECCI began development of practical climate change mitigation strategies using agriculture and forestry activities in 1997. Our climate change mitigation technology uses deliberately managed landscapes to create saleable products and store carbon. We measure carbon that is removed from the air and stored (sequestered) by terrestrial plants grown for food, fiber and renewable fuel. We calculate units of sequestered carbon and call them EARTHCREDITS.

EARTHCREDITS and allied ecosystem services, are produced by farmers, ranchers and managers of other landscapes who produce vital goods and services for the country and measurably reduce the overall air pollution burden.

Environmentally Correct Concepts, Inc. has been granted three United States patents and corresponding foreign patents for identifying agricultural and forestry activities that store carbon and for methods to quantify greenhouse gas offsets from such activities.

- Patent No. 5,887,547 was granted for processes that sequester carbon from the atmosphere into grassy and herbaceous plants and the soil they grow in; also for methods to measure and quantify amounts of greenhouse gases removed from the air on an annual basis.
- Patent No. 5,975,020 was granted for processes that sequester atmospheric carbon in the controlled growth of woody plants, the soil they grow in and the humification of animal waste and plant material other than roots as well as methods to measure and quantify such amounts of sequestered carbon.
- Patent No. 6,115,672 was granted for a method of measuring carbon credits to be sold to a purchaser of carbon credits or the equivalent.

ECCI and DOE/EIA

ECCI collaborated with the EIA to elucidate grassland manipulation activities and tailor subsequent reporting to quantify sequestered carbon. Results were published in *Report #. DOE/EIA-(99).*

The full report can be viewed at <http://www.eia.doe.gov/oiaf/1605/vr98rpt/front.html>

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An excerpt from Chapter 5 of that report follows:

Not all carbon sequestration projects involved forestry. New projects reported for 1997 by Environmentally Correct Concepts, Inc. (ECC), ... used other approaches to increase carbon sequestration. ECC established permanent pastures on three tracts, comprising 33 acres on a farm in Illinois used primarily for cattle grazing and hay production. ECC reports that 55 percent of the carbon fixed by grassy and herbaceous plants is stored below ground in roots, corms, tubers, etc., and that the accumulated carbon is either retained in the plant structures themselves or released into the soil as the plants decay. The remainder of the fixed carbon is stored above ground in structures such as leaves, stems, and seeds. ECC has implemented enhanced management techniques to increase the accumulation of carbon below ground. ECC estimated the average sequestration for 1997 for these tracts at 8.8 metric tons of carbon dioxide per acre (5.7 below ground and 3.1 above ground).

Agriculture and Forestry Projects that Sequester Carbon

Vegetative Conversion

Planting grassy & herbaceous plants in areas that have not recently supported such plants. For example, converting cropland to perennial vegetation.

Revegetation

Planting or overseeding additional grassy & herbaceous plants in an area that has been recently grazed, mowed, etc.

Urban Grasslands

Planting of vegetation in urban, suburban or right of way areas for the purpose of sequestering carbon

Grassland Preservation

Protecting an existing area of grassland from conversion to another land use.

Modified Grassland Management

Improving the management practices of an existing area of grassland to increase carbon sequestered or reduce the release of carbon dioxide.

Agroforestry

Combining agriculture and forestry on the same land area to provide agricultural products while sequestering more carbon. For example, managing the understory of an orchard or tree plantation through grazing to optimize production.

Bio-energy Production

Planting and harvesting vegetation for the purpose of supplementing or substituting (fuel switching) fossil fuels as an energy source.

Grass Products

Increased usage of products developed from grass such as building materials.

Conservation Tillage/No-Till

Producing crops that sequester carbon without the use of broadcast tillage.

Manure Management

Reducing storage time and/or converting to energy.

Controlled Growth of Woody Plants

Actively managing woody plants for a use. Activities include planting woody plants on land that has not recently supported such plants, revegetation with woody plants and improving management practices of existing areas of woody species.

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Carbon -- A New Agricultural Product

ECCI believes designating sequestered carbon a new agricultural product, produced by farmers, ranchers and other landscape managers throughout the United States, facilitates its commercialization. Equating carbohydrate carbon with agricultural products such as milk, meat or grain allows the USDA to include sequestered carbon in existing programs and services, inspections and regulations, promotion and marketing, and risk management.

Standards and specifications pertaining to units of carbon stored below ground in soil and roots as well as units of carbon stored above ground in plant structures, which can be switched with fossil carbon, need to be reconciled, recognized and understood by both the producer and user. Farmers know what is expected of them if they sell corn on a #2 basis. Similarly farmers are familiar with “Warehouse Receipts” from bonded grain warehouses. It is our view that carbon credits, secured by amounts of carbon stored in soil, are analogous to warehouse receipts for bushels of grain stored in bonded warehouses.

Fortune 500 companies who emit significant amounts of greenhouse gases will contract with farmers and ranchers for carbon scavenging and storage services as well as supplies of fuel. Risk management products specific to bioenergy crops and feedstocks and the resultant fossil carbon offsets created by using bio-based renewable energy need to be part of the Federal Crop Insurance program. Producing a crop to meet energy needs or to remove pollutants from the air, implies more risk than digging or pumping fossil fuel energy with no regard to the air pollution burden.

Anthropogenic landscape changes on farms and ranches often take years to accomplish because they are dependent on growing conditions as well as economic and societal factors. We believe that accounting rules need to allow farmers and ranchers to elect 1987 as the earliest year to establish beginning carbon inventory baselines. 1987 was the year many farmers voluntarily developed and began implementing conservation plans on land that has the potential to store carbon.

ECCI is willing to contribute its expertise and license its intellectual property in the national effort to assess the technical and methodological issues associated with developing new forest and agricultural accounting rules and guidelines for carbon sequestration on public and private lands in the United States.

For additional information, please contact:

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